



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6

**1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733**

January 20, 2015

Mr. Carlos Swonke, P.G.
Director, Environmental Affairs Division
Texas Department of Transportation
Dewitt C. Greer State Highway Building
125 E. 11th Street
Austin, Texas 78701

RE: Detailed Comment Letter for Final Environmental Impact Statement
U.S. 181 Harbor Bridge Replacement/State Highway 286 Improvement Project in
Corpus Christi, Nueces County, Texas

Dear Mr. Swonke:

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region Office in Dallas, Texas has completed its review of the Final Environmental Impact Statement (FEIS) for the U.S. 181 Harbor Bridge Replacement/State Highway 286 Improvement Project in Corpus Christi, Texas, prepared by the Federal Highway Administration (FHWA) and Texas Department of Transportation. The FEIS evaluates the effects of replacing the Harbor Bridge and the reconstructing portions of U.S. 181, Interstate Highway 37 and the Crosstown Expressway.

EPA provided comments on the Draft Environmental Impact Statement (DEIS) on March 18, 2014, in which the DEIS was rated as "Environmental Concerns and Insufficient Information" (EC-2). EPA continues to have environmental concerns with environmental justice and surrounding communities and mitigation measures. We have enclosed detailed comments that identify our concerns and recommendations for additional clarification and commitments in the Record of Decision (ROD).

EPA appreciates the opportunity to review the FEIS. Please note that a copy of this letter will be published on our website, <http://www.epa.gov/compliance/nepa/eisdata.html>, in order to fulfill our responsibility under Section 309 of the CAA to inform the public of our views on the proposed Federal action. Please send a copy of the ROD to my attention. If you have any questions or concerns, please contact Kimeka Price at (214)665-7438 or via email at price.kimeka@epa.gov for assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "John Blevins", is written over a horizontal line.

John Blevins, Director
Compliance Assurance and
Enforcement Division

Enclosure

**DETAILED COMMENTS
ON THE
FEDERAL HIGHWAY ADMINISTRATION
AND
TEXAS DEPARTMENT OF TRANSPORTATION
FINAL ENVIRONMENTAL IMPACT STATEMENT
FOR HARBOR BRIDGE PROJECT IN
CORPUS CHRISTI, NUECES COUNTY, TEXAS**

BACKGROUND

The FEIS evaluates the effects of replacing the Harbor Bridge and reconstructing portions of U.S. 181, Interstate Highway 37 and the Crosstown Expressway. Additionally, the FEIS describes and analyzes the potential effects from four alternative actions and the No Action alternative relating to land use, modes of transportation, public services and utilities, economic and employment conditions, community demographics and environmental justice, air quality, traffic noise, water resources, flood plains, soils and geology, vegetation and wildlife, threatened and endangered species, cultural resources, hazardous materials, and visual and aesthetic resources.

COMMENTS

The following comments are offered for FHWA's and TXDOT's consideration in preparation of the Record of Decision:

Environmental Justice and Impacted Communities

Indirect Air Quality Impacts: Any increased entry of post-Panamax vessels into the Port of Corpus Christi, changes in heavy truck traffic and traffic patterns related to port cargo movement, and traffic patterns resulting from elevating the height of the bridge is a reasonably foreseeable indirect effects. These changes could lead to an increase in air emissions to the adjacent minority and low-income populations in the Northside community.

Cumulative Air Quality Impacts: The relocation of US 181 into the Northside community will effectively enclose the Hillcrest neighborhood on all sides: US 181 on the eastern border; I-37 on the southern border; Flint Hills Resources on the western border; and railways, the ship channel, and the Joe Fulton Trade Corridor on the northern border. The FEIS appears to have only analyzed cumulative air impacts to the general population and only at a regional level. Further, the cumulative impacts section in the FEIS identifies the cumulative air impacts as minimal and that the impacts will be sufficiently mitigated by implementation of EPA's vehicle and fuel regulations (p. 7-46). However, Table 7.3-1 depicting MSAT NATA data indicates ambient concentrations of all 7 MSATs for Census tracts 4 and 5 (which loosely

correspond to the Northside community) are greater than the concentrations in Nueces County. Also, Table 7.3-1 indicates that the ambient concentration of diesel particulate matter in Census tract 4 is $3.787 \mu\text{g}/\text{m}^3$. Whereas, the diesel particulate matter concentration for Nueces County is only $0.870 \mu\text{g}/\text{m}^3$. The NATA data indicates the concentration of diesel particulate matter in Census tract 4 is approximately in the 98th percentile compared to all other Census tracts in the state of Texas, and is four times greater than the concentration in Nueces County. Given that NATA cannot be used to identify concentrations at "hot spots" or specific geographic locations (see Chapter 7 of the TSD for the 2005 NATA -- http://www.epa.gov/ttn/atw/nata2005/05pdf/nata_tmd.pdf) and that NATA uses a "top-down" approach to allocate vehicle activity to the census tract level, the NATA results do indicate a need for further assessment. Further, the FEIS identifies increases in shipping and rail transportation activity in the area; current and proposed transportation and development projects in the area (Table 7.5-1); and the plan to connect I-69 to the Port of Corpus Christi, all of which may likely bring increased air emissions to the area.

Direct Air Quality Impacts: The FEIS states localized increases in MSAT emissions would likely be most pronounced along new roadway sections constructed closer to adjacent residential areas, including along US 181 north of SH 286 and I-37 (p. 4-125), and these emissions will be predominantly borne by minority and low-income populations (p. 4-105). Table 7.3-1 depicting MSAT NATA data indicates ambient concentrations of all 7 MSATs for Census tracts 4 and 5 (which loosely correspond to the Northside community) are greater than the concentrations in Nueces County. FHWA Order 6640.23A states that when an adverse effect is predominantly borne by a minority or low-income population, the impact is disproportionately high and adverse. As such, all practicable mitigation of near-road air impacts to this population should be considered. However, the FEIS further states that direct air impacts to low-income and minority populations are minor (p. 4-105). By primarily analyzing air impacts at the regional level, the FEIS does not give adequate consideration of near-road air emission impacts to minority and low-income populations in the Northside community. CEQ's *Environmental Justice Guidance under the National Environmental Policy Act* states that "Agency consideration of impacts on low-income or minority populations...may lead to the identification of disproportionately high and adverse...effects that are significant and that otherwise would be overlooked" (p. 10). It does not appear that a sufficient analysis of localized impacts from MSAT emissions is presented in the FEIS.

Additionally, CEQ's *Environmental Justice Guidance under the National Environmental Policy Act* states that "Agencies should recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action. These factors should include the physical sensitivity of the community or population to particular impacts" (p. 9). The environmental justice analysis in the FEIS does not appear to have given consideration to any factors that may amplify the near-road air emissions (e.g. community asthma rates). While near-road air emissions may be minor for the general population, the impact may be amplified for minority and low-income populations in the Northside community.

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Further, the FEIS indicates that near-road air impacts will be sufficiently mitigated by implementation of EPA's vehicle and fuel regulations (p. 4-125). The regional-level quantitative analysis for MSATs in the FEIS looked at total emissions for each affected transportation network (p. 4-125) but did not specifically analyze emissions at locations along the transportation network where MSATs may increase. Without identifying the localized MSAT increases to minority and low-income Northside residents in close proximity to the proposed action, it is unclear to what degree these populations are potentially impacted. While it may be true that EPA's national vehicle and fuel regulations will result in lower levels of ambient air pollution over time regardless of project alternative, nevertheless the preferred alternative will presumably result in near-roadway populations facing additional exposure to air pollutants than they would otherwise in the absence of the alternative.

Recommendation for All Air Quality Impacts:

Incorporating air quality monitoring, and an adaptive management plan¹ into the ROD as well as the Community Sustainability Plan for the Northside Community may be a practicable mitigation measure.

Mitigation of Adverse Effects

The FEIS identifies, with the exception of the No Build Alternative, the proposed project would result in adverse effects on minority populations and low-income populations, regardless of the alternative chosen in Section 4.7.6 Measures to Avoid, Minimize and Mitigate Adverse Effects.

Visual and Aesthetic Impacts: In Section 4.7.3.8 Visual and Aesthetic Impacts under Chapter 4 Environmental Consequences, the FEIS identifies that minority and low-income Northside community stands to be affected most by the Preferred Red and Orange Alternatives. Also, it states that the alignment of the Preferred Red Alternative would represent a substantial change in the visual and aesthetic character of the neighborhood.

On page 4-233, the FEIS identifies that the view of the Preferred Red Alternative from the Hillcrest neighborhood would be more pronounced than that of the Green or Orange Alternatives, though the line of sight in many parts of the neighborhood would be below existing utility and tree lines. Views of the proposed facility from the Washington-Coles neighborhood would also be more pronounced (see Illustration 4.20-1), and the introduction of the facility into the Northside area would add to the urbanized aesthetic of the neighborhood already characterized by proximity to I-37, the Port, the Broadway Water Treatment Plant and the downtown area. The visual character of portions of the Washington-Coles neighborhood would be changed substantially, particularly in the area of T.C. Ayers Park and the residential areas surrounding the park. On page 4-235, the FEIS identifies that the proposed Preferred Red

¹ Council on Environmental Quality (CEQ) Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact; CEQ NEPA Task Force Report – Modernizing NEPA Implementation; CEQ National Environmental Policy Act – A Study of Its Effectiveness After Twenty-five Years.

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Alternative would cause changes that could be considered visually incompatible with the residential areas of the Northside neighborhoods.

In Section 9.3.4 Aesthetic Enhancements under Chapter 9 Environmental Permits, Issues, and Commitments, the FEIS identifies that there will be an ongoing process to determine aesthetic treatments for the proposed project (p. 9-6). Given that the mitigation measures are proposed to address adverse aesthetics and visual impacts, and will be determined after issuance of the FEIS, EPA believes that a commitment to follow through on suggested aesthetic treatments, as appropriate, be articulated in the ROD.

Recommendation:

A discussion or rationale of how the determination, of which mitigation measures sufficiently address the aesthetic and visual impacts, will be made should be incorporated in the ROD as well as a clear commitment to implement those measures.

Traffic Noise Impacts: In Section 4.7.3.5 Traffic Noise Impacts of Chapter 4 Environmental Consequences, the FEIS identifies traffic noise impacts would be concentrated along the roadways where improvements are planned and would be borne predominately by low-income and minority populations. Noise abatement has been considered and noise walls are proposed in three separate locations, depending on the alternative. The Preferred Red Alternative would result in noise impacts to 351 residential receivers after applying noise abatement (noise barriers in three locations). The Orange Alternative would result in impacts to 281 residential receivers after applying noise abatement (noise barriers in three locations). The West Alternative would result in impacts to 238 residential receivers (noise barriers in two locations).

Under the Preferred Red Alternative, 204 residential receivers in the Washington-Coles and Hillcrest neighborhoods would experience traffic noise impacts (see Noise Plates R-3, R-6, and R-7 in Appendix I). Noise abatement measures were considered as part of the traffic noise analysis, and none of these measures were reasonable and feasible for the Northside community under the Red Alternative. Also, under the Preferred Red Alternative, 223 residential receivers in all of the Westside neighborhoods would experience traffic noise impacts (see Noise Plates R-3 through 6 in Appendix I). Approximately 533 receivers would be expected to experience traffic noise impacts over the NAC in 2035 and approximately 33 receivers would be expected to have future noise levels exceed existing noise levels by more than 10 dBA. Impacts would be located throughout the study area, although noise impacts would be heavily concentrated along US 181, between the Inner Harbor and I-37; along the Crosstown Expressway, between I-37 and Morgan Avenue; and along I-37 between Up River Road and the Crosstown Expressway (p. 4-139).

In Section 9.6 Traffic Noise Impacts under Chapter 9 Environmental Permits, Issues, and Mitigation, the FEIS identifies that TXDOT would hold public noise workshops and allow the property owners to vote as to whether to construct the barrier. Given that the mitigation measures are proposed for adverse traffic noise impacts, and a determination will be made after

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issuance of FEIS if the noise barriers will be implemented, EPA believes the ROD should clearly articulate the rationale for deciding on the need for noise barriers and include a clear commitment to implement this mitigation, if it is determined to be appropriate.

Recommendation:

A discussion or rationale of how the determination, of appropriate mitigation for adverse traffic noise impacts, will be made be incorporated in the ROD as well as a clear commitment to implement those measures. Also, TXDOT and FHWA should consider whether it may be practicable in some locations to dampen noise impacts with building improvements (e.g. new windows).

Other Recommendations

Community Cohesion and Access Impacts: The FEIS identifies that the Preferred Red Alternatives contributes to further urbanization of the community and separation between the Hillcrest and Washington-Coles neighborhoods, which affects cohesion in the Northside community as a whole (p. 4-84). The community's sense of living in a neighborhood could be negatively impacted for residents of Washington-Coles, considering the potential population loss and the introduction of a major transportation facility. The FEIS identifies that indirect effects occurring later in time to the Northside community under the Preferred Red Alternative would include separation and decreased connectivity overall. Similarly, the longer-term effects of the physical separation between the Hillcrest and Washington-Coles neighborhoods under the Preferred Red Alternative would be expected to adversely affect the cohesion of the Northside community (p. 6-40). Also, Table S.5-1 Summary of Impact Comparison for Preferred Red Alternative summarizes community cohesion and access impacts.

The roughly 30-block Washington Coles neighborhood would be a small, triangular enclave bounded by highway/freeway infrastructure on the west and south side and the Broadway Water Treatment plant on the north side. In the FEIS (page 9-4) it is stated: "to offset the potential community cohesion effects of the loss of access across US 181 via Winnebago Street, the extension of Lake Street to replace access would serve to connect neighborhood parks and other important community resources." This statement is confusing because Winnebago street runs parallel to US 181 and does not cross it. Brownlee Boulevard currently crosses (via and underpass) US 181 and connects to Winnebago. Brownlee is vacated which cuts off the Washington Coles neighborhood even more from the rest of the city. There are two access roads on either side of the highway that cross US 181. These do not appear to be surface streets and appear to only serve to access the Crosstown Expressway.

The FEIS stated that TXDOT hosted a Livability Summit in Corpus Christi, where EPA was invited as presenters on certain agency programs, as a way of mitigating for the loss of community cohesion and access. The Livability Summit was held October 15, 2014, which occurred after the issuance of the DEIS. The FEIS states that input from the Livability Summit would contribute to a Community Sustainability Plan to be developed by TXDOT for the Northside neighborhoods, and drafted and finalized within one year of the start of construction of

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the proposed project (Section 9.3). This specific plan was not identified as a mitigation measure in Section 9.3 Environmental Justice under Chapter 9 Environmental Permits, Issues and Commitments (Including Mitigation) of the DEIS. No specific details, actions, or schedules for the Community Sustainability Plan were provided in the FEIS. Given that the Community Sustainability Plan is likely to contain recommended actions that serve as mitigation measures to address adverse impacts; and will be developed, drafted, and finalized after the FEIS, EPA believes that commitments to follow through on suggested actions arising from the Sustainability Plan, as appropriate, be articulated in the ROD.

Recommendations:

- A discussion or rationale should be included in the ROD to specifically address how identified mitigation measures offsets specific impacts to community cohesion and access to the degree that the impacts would no longer be adverse. Additionally, a clear commitment to implement those measures should be included.
- The ROD should contain a commitment to address recommended mitigation measures arising from the Community Sustainability Plan, as appropriate, with the understanding that said commitment may involve partnerships with other agencies, state and/or local entities, or other organizations.
- TXDOT and FHWA should develop a Community Sustainability Plan for the Northside neighborhoods, which would include the identification of grant opportunities to further the goals and strategies of the Plan.
- TXDOT and FHWA would continue to work with the Partnership for Sustainable Communities. Further, the FEIS appropriately referenced the Joint Lead Agencies, identifying FHWA, EPA and HUD, city of Corpus Christi, the Port of Corpus Christi Authority, the MPO and the Regional Transportation Authority.
- An Advance Funding Agreement (AFA) between the City of Corpus Christi and TXDOT should be developed to identify the parties responsible for carrying out actions and improvements described in Sections 9.3.1 and 9.12.
- To advance sustainability in the Northside neighborhood, including the production and implementation of an effective Community Sustainability Plan, EPA recommends that the following be included and clarified in the ROD:
 - Northside Community Outreach and Engagement:
 - The HUD-DOT-EPA Partnership for Sustainable Communities (PSC) has developed an effective methodology for advancing sustainability through its Greening of America's Capitals Project (GACP). EPA believes that the tasks and deliverables utilized for GACP can be utilized for the

development of the Northside Community Sustainability Plan. These include:

- **Task 1 – Conduct Pre-Charrette Project Area Assessment and Develop Initial Schematics:** The purpose of this task is to utilize site visits to establish baseline conditions for the project area and develop initial design alternatives that address the needs of the community and are appropriate for the specific site conditions. The discussions on baseline conditions and initial design alternatives will form the basis for an on-site Charrette.
- **Task 2 – Charrette Preparation:** The purpose of this task is to identify the necessary mix of stakeholders for participation in the Charrette and develop a detailed Charrette schedule.
- **Task 3 – Conduct On-site Design Charrette and Public Open House:** The purpose of this task is to conduct a Charrette which will serve to further develop the design options based on schematics developed in Task 1 and convene public open house events that allow for community input on the goals of the projects and the design options prepared, and educate participants to the topic of green infrastructure, and green and complete streets.
- **Task 4 – Final Design Options:** The purpose of this task is to create a set of design options to be used by TXDOT and Joint Lead agencies for fundraising activities (e.g., grant applications, etc.), and for additional community involvement and outreach.

Accordingly, EPA recommends that the process for producing the Northside neighborhood Sustainability Plan be included in the ROD, and be based on the successful methodology developed by the Partnership for Sustainable Communities for its Greening America's Capitols project.

- EPA recommends that the AFA serve as mechanism for identifying actions to be taken to implement the Community Sustainability Plan for the Northside neighborhoods and for the parties responsible for taking those actions. Further, EPA recommends that these AFA mechanisms be included in the ROD.

- EPA recommends that an MOU between Joint Lead Agencies be executed to formalize agreements that are made between the parties. The MOU should also include recognition that:
 - The Community Sustainability Plan for Northside neighborhoods is a key factor towards the favorable decision for the approval of this project.
 - If the sustainability plan is not implemented within a reasonably identified timeframe, FHWA and TXDOT will actively work with the responsible parties to develop a contingency plan to accomplish the necessary mitigation outlined in the Community Sustainability Plan.
 - Further, EPA recommends that the elements of the MOU be included in the ROD.
- EPA believes that focusing mitigation attention onto streets of the Northside neighborhood, especially the Washington Coles neighborhood, is consistent with the outcomes from the October 15, 2014 Corpus Christi Livability Summit hosted by the Corpus Christi Metropolitan Planning Organizations (CCMPO) and FHWA. Comprehensive transportation, multi-modalism and complete streets were ranked as the highest concern amongst most of the groups who participated, documenting the critical need in the neighborhood for streets that serve mobility and access needs, and also serve as social spaces for neighborhoods to congregate. EPA believes that creating a “green and complete street” network (defined in the following section) within the Washington Coles neighborhood would go far to improve the quality of life for the residents, possibly spur new private investment, and serve as a model for the rest of the entire city. Accordingly, EPA recommends that mitigation measures that would create a green and complete street network within the Washington Coles neighborhood be included and clarified in the ROD, considering the following general steps:

Task 1 – Convene a working group consisting of, but not limited to:

- Transportation experts from city, MPO, state, federal Departments of Transportation; city/county/MPO transit agency staff; ped/bike advocacy groups; ADA compliance staff, etc.
- Storm water experts from city departments (public works, parks and urban forestry, etc); utilities; academia.
- Neighborhood leaders.

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Task 2 – Assess existing conditions related to current street network; drainage and flooding issues; current and projected land use; neighborhood needs; regulatory constraints (or opportunities).

Task 3 – Develop a set of design solutions that can meet the mobility, social and environmental needs of the neighborhood.

Task 4 – Engage residents in matching the design solutions with specific streets or street types.

Task 5 – Implement an action plan by identifying funding sources; and developing a near-, mid- and long-term time schedule for improvements.

- EPA believes that focusing mitigation attention on stormwater management and green infrastructure in the Northside neighborhood, especially the Washington Coles neighborhood, is consistent with the outcomes from the October 15, 2014 Corpus Christi Livability Summit hosted by the Corpus Christi Metropolitan Planning Organizations (CCMPO) and FHWA. Given that approving a storm water master plan and improving utilities was a top priority for local residents and representatives of grassroots organizations groups, sustainability measures can make a significant contribution to improving water quality and addressing localized flooding while also enhancing the attractiveness of the neighborhood. Accordingly, since complete streets and green infrastructure are priorities for the neighborhood, and the FEIS states that a mitigation measure for reducing pollutants into the local waters by the “implementation of permanent BMPs” that “where practicable, would be located in existing rights of way or previously disturbed area to avoid or minimize adverse effects” EPA recommends as a mitigation measure the creation and implementation of a “green and complete” street network in the Washington Coles neighborhood, which could be expanded to the neighborhoods west of the highway. A green and complete street is defined as a street that is safe for all users including pedestrian and bicyclists that also incorporated green infrastructure strategies to manage and treat polluted stormwater runoff, and reduce flooding risks. A green and complete street can also be designed as a slow, or shared street where the entire right-of-way can be used as public open space while still accommodating (slow moving) traffic and parking. Accordingly, EPA believes that mitigation measures that would incorporate green infrastructure to address water quality and flooding within the Washington Coles neighborhood be included in the ROD.

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- EPA is concerned that the isolation of the neighborhood due to the project would hinder private investment. EPA therefore recommends that in addition to public investments made to the public rights-of-way (which could, in turn, attract private investment) attention also be paid to the large number of vacant parcels in the Northside neighborhood, especially the Washington Coles neighborhood. EPA recommends as a mitigation measure that a green infrastructure assessment be completed. In this manner, vacant lands can be evaluated for suitability to support green infrastructure, such as community gardens, “pocket parks” and green streets that link the residents with trail networks and other urban amenities. Accordingly, EPA believes that mitigation measures that would incorporate revitalization of vacant properties, including a green infrastructure assessment, within the Washington Coles neighborhood be included in the ROD.
- In addition, EPA believes that vacant properties can be considered for use as buffers between residences and the highway. Accordingly, EPA recommends that a mitigation measure be included in the ROD which follows a similar process described in the Complete Streets section, but specifically develops a set of non-residential uses that serve as a buffer between residents’ homes and the new bridge connector which provide benefit to the community. Uses could include community gardens, storm water wetlands, tree nurseries, and incubator spaces for small, light industrial businesses.
- EPA is concerned with the loss of park space in the neighborhood, and supports of conversion of the former Washington Elementary School into a new park. As previously stated, EPA recommends that in addition, opportunities for more recreation space be explored in the public right-of-way (for instance, basketball courts installed in otherwise unutilized street space), and within some vacant properties. Further, EPA believes that mitigation measures which can avoid or minimize potential near-roadway health impacts be included in the ROD. At a minimum, resources available from FHWA related to health in transportation planning, smart growth, and other related topics should be provided. Further, TXDOT should disclose the potential near-roadway health impacts and ensure that the community has access to the most current information available regarding safeguarding health from air pollution. In addition, the ROD should include application of FHWA’s Context Sensitive Solutions (CSS) approach which involves interdisciplinary teams working with public and agency stakeholders to tailor solutions to the setting; preserve scenic, aesthetic, historic, and environmental resources; and maintain safety and mobility in order to deliver a transportation project that is responsive to the unique character of the communities it serves. Finally, the ROD should include exposure reduction practices involving distance separation between the roadway and the sensitive land use (e.g. parks, playgrounds, schools, and residential communities), site redesign and tiered vegetative plantings.